Form & Analysis **Name**: KEY
Harmonic Reduction and Analysis G. Fankhauser

Chopin, Prelude in C, op. 28, no. 1 (1836) https://youtu.be/QpEit_Lll0k?t=7

1. Complete a *reduction* of the entire piece for SATB (4 voices) in the staves provided. Aim for simplified rhythm, texture, and range, using one chord per measure. Embellishing tones may be entered as noteheads (no duration). The first measure is done for you. Your reduction of m. 29 may include five voices. See p. 3.

2. What voice has the primary melodic line? Does it maintain for the entire Prelude? Do you consider the reduction in m. 1 appropriate? Explain. The main melody is initiated with the G3 in the tenor, which is then doubled by the soprano's G4, a doubling that maintains throughout the Prelude. To place the melody solely in the soprano in the reduction removes the doubling of the voice using a more conventional range. The G3 in the reduction follows the lower G2 in the score.

3. Beneath your reduction, provide a *harmonic analysis*. Identify by *type* all six-four or other *linear chords* (passing "P" or neighboring "N"). See p. 3.

4. Identify all *cadences*. Analyze the *phrase structure* and *form* of the piece. With only a half cadence (HC) and imperfect authentic cadence (IAC, extended in the coda to a PAC), the whole prelude forms an asymmetrical parallel period, an AA' one-part form.

5. Explain how the harmony in m. 22 functions. Why would Chopin spell the chord the way he does? The beautiful vii°$^{7}_{(4–3)}$/V respells the seventh, E♭, as D♯ to resolve briefly *up* to the sixth of the cadential six-four chord (D♯–E). In major, vii°^{7}/V is often spelled this way when leading to a cadential six-four.

6. Does the music satisfy voice-leading principles of the Common Practice (proper resolution of dissonances, no parallel fifths, etc.)? If not, cite an example of a violation.
Mostly, yes. Most notable violations are the *parallel fifths and octaves* in mm. 17–18, providing a good example of how parallel fifths or octaves are not inherently "bad" but have to be treated carefully. The parallels are mitigated by the sixths formed between the outer voices and (more) the dissonances formed between the melody and the tenor (7–8, 7–8). The tenor forms a *voice overlap* with the bass in mm. 21–22.

7. Which measure contains the climax of the piece? What leads to that climax? Justify your answers.
m. 21. A continual attempt by the melody to rise up, beginning in m. 1, failing in m. 8, and then really taking off around m. 16 achieves its goal in m. 21.

8. How does the rhythm change in mm. 18–20, and what purpose does the change of rhythm serve?
Whereas in the opening measures the melody follows a rest in sixteenth-note triplets, the melody shifts to the downbeat in m. 18 (more accented) in quintuplets (a more complex 5 against 6). Both changes intensify the energy and heighten the push toward the climax.

9. What is gained and what is lost in this *reductive analysis*?
Reductive analysis does not aim to judge what musical elements are important but to clarify certain elements over others. The reduction below omits rhythm, performance indications, and other details of the music so that analysts and performers may more easily understand the harmony and voice leading. Note how performance of the reduction itself coheres musically and resembles the original.

10. Compare and contrast a few recordings. List the performers and note differences in interpretation, especially regarding questions above. Performances vary widely. Listen for different interpretations of the sole instruction of *Agitato*—How quick? How "agitated"? For example, compare the short and choppy performance of Grigory Pogorelich to the more legato performance of Grigory Sokolov. Listen for treatments of the climax, such as Arthur Rubinstein's broadening or halting on the climax compared to Alfred Cortot's (1933) pushing through the climax. Also see Urista 2007.

Extra challenge (may require outside research):

11. Describe how the basic motive G–A (what Schoenberg might call the *Grundgestalt*) creates and develops a musical narrative throughout the music. Specifically, one could analyze the A4 in m. 1 as an *upper neighbor*, but what does the A "want" to be? How does the A4 in m. 3 differ from in mm. 1–2?

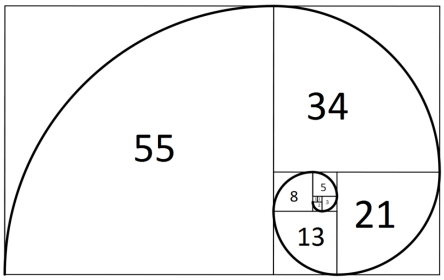
    The opening measures' G–A–G–A… motion may seem like neighboring motion, but by m. 4 we hear the A as "wanting" to ascend, to pass upward. Therefore, we might call the A4 in m. 1 an unusual "incomplete passing tone." In m. 3, the A finally serves as a bona fide passing tone. The paired neighboring motion (or passing motion) forms the motivic basis throughout the prelude. The inversion of the motive in mm. 5–7 (E–D–E–D) reverses the melodic direction back downward. Notice how the "Rule of Three" applies: Something is altered with the third repetition. The passing tone motive is most energized in mm. 16–20 with the long run upward and the increased rhythmic complexity.

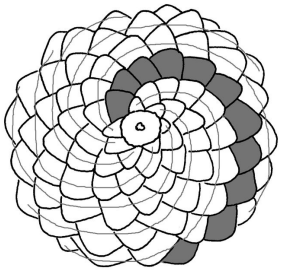
12. Research the Fibonacci sequence: 1 1 2 3 5 8 13 21 34… How does the climax divide the Prelude at the *Golden Mean*? List other important events in the piece by those Fibonacci measure numbers. Do they support this ratio? Explain.

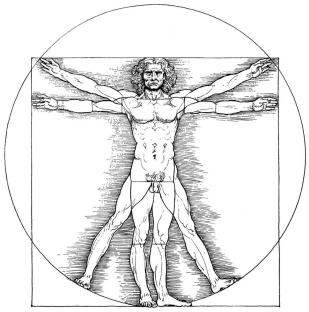
    Significant events in the Prelude at each Fibonacci measure number (1, 2, 3, 5, 8, etc.) include:

    m. 1 Opening music, definition of key and rhythm, presentation of the basic motive
    2 First motion away from tonic, from I to V$^6_5$. The V$^6_5$ may be heard as neighboring the tonic (including C–B–C, E–F–E) more than as a new harmony.
    3 Third statement of the motive, in which the A first realizes its potential as a passing tone.
    5 First significant harmonic change. After tonic is prolonged throughout mm. 1–4 (with a neighboring V$^6_5$ in m. 2), the supertonic enters in m. 5.
    8 First cadence and failed attempt of the melody to rise higher
    13 First chromatic melodic tone enters and alters the direction of the melody upward, compared to the downward motion of the corresponding m. 5.
    21 Climax of the piece. Literally the highest point but also the goal of preceding measures. This measure marks the Golden Mean of the music with remarkable precision, not just around 2/3 = .66% but 21/34 = .618! The true Golden Ratio is an irrational number: .618033… (more commonly described as its inverse, which is shares similar irrationality: 1.618033…)
    34 End of the prelude. It almost seems like Chopin added the coda—especially the last measure—simply to align measures with Fibonacci numbers, but that is unlikely. The coda recalls the opening G–A motive and its inverse E–D from mm. 5–7.

    So, do significant measures throughout the Prelude support Fibonacci ratios? Yes, remarkably well. A natural question might be, did Chopin intend for these Fibonacci proportions? Was that part of his compositional plan? Probably not, but analysts often view a clear presence of Fibonacci ratios in works of art and architecture (intentional or not) as a sign of the creator's intuitive sense of balance and aesthetic for natural formations, as seen in the chambered nautilus, coneflower spirals, and countless other structures in Nature.







Chopin, Prelude in C, op. 28, no. 1: Reduction and analysis (Fankhauser)